

Figure 1

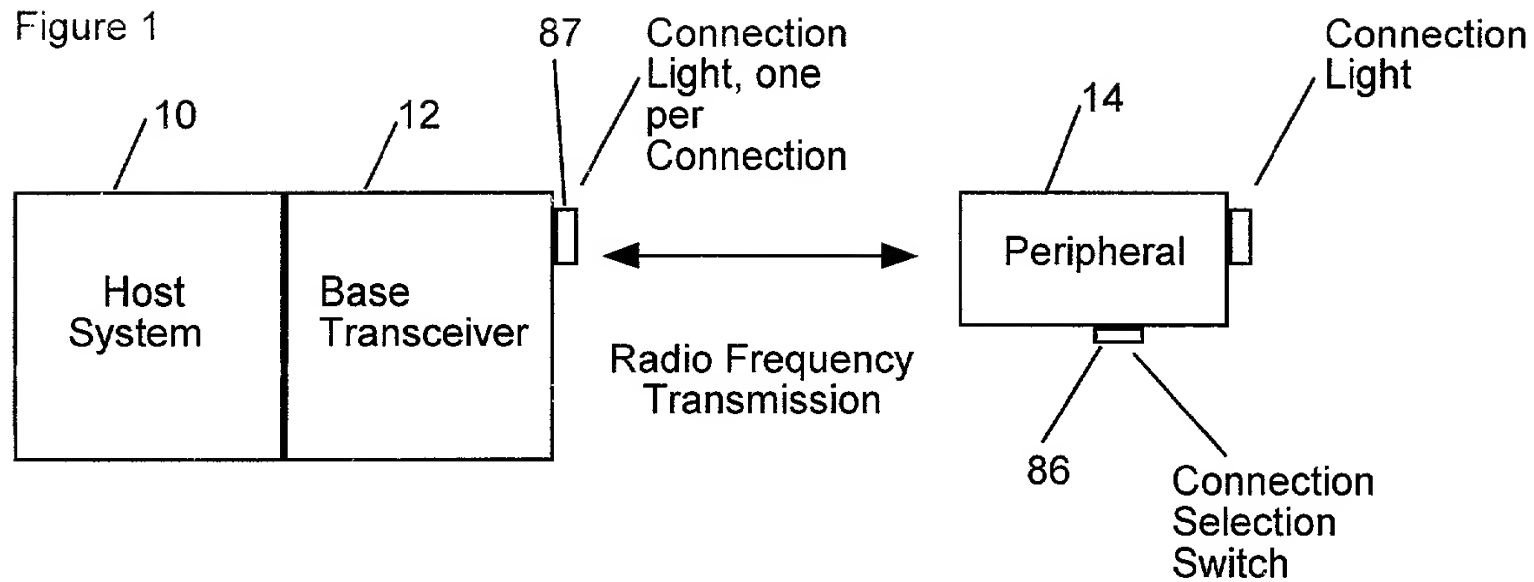


Figure 2

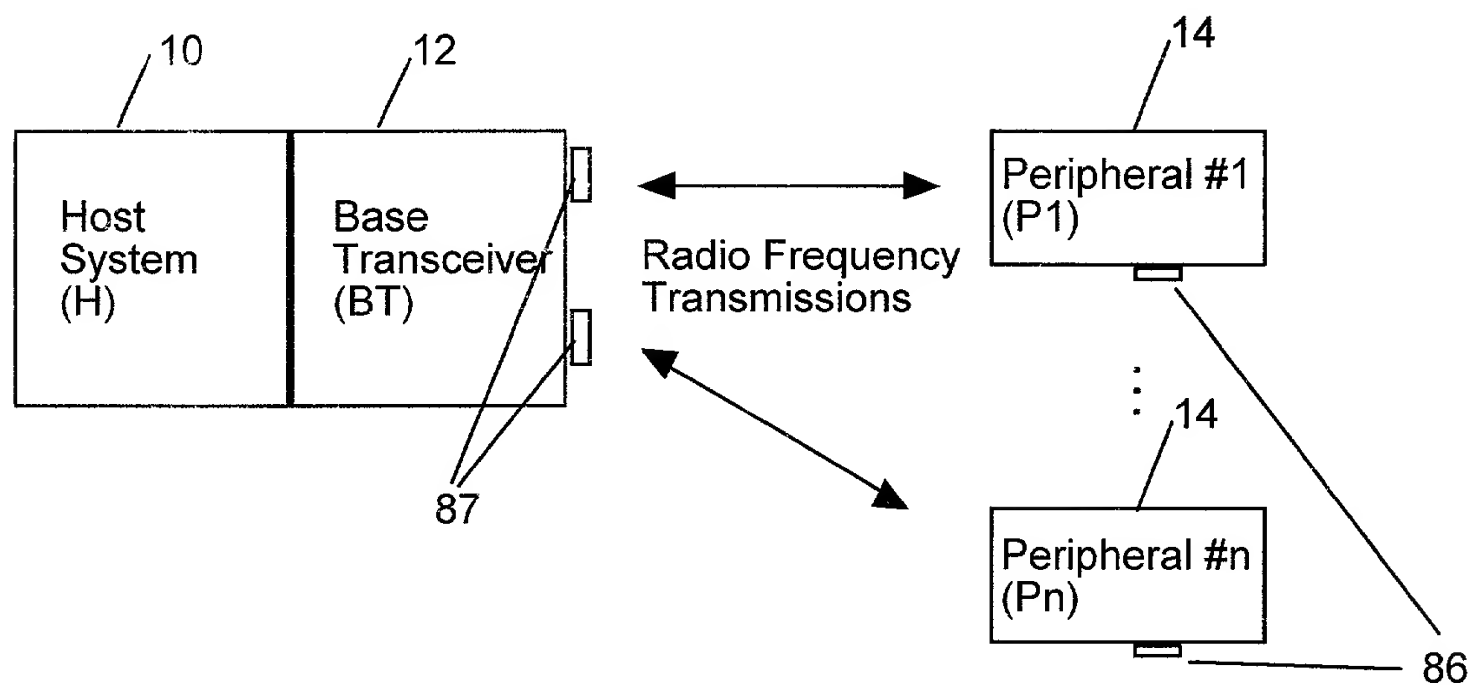


Figure 3

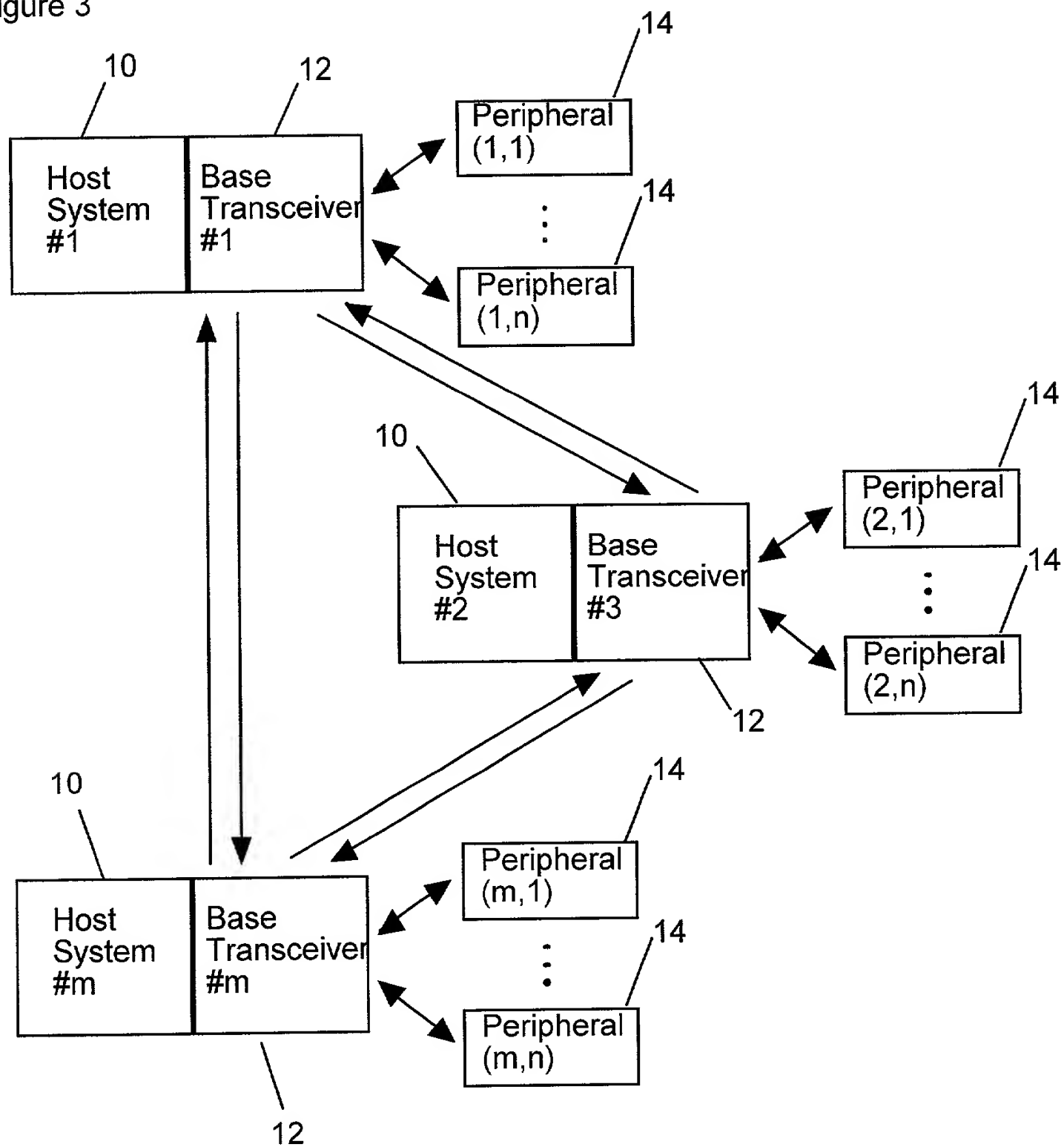


Figure 4a

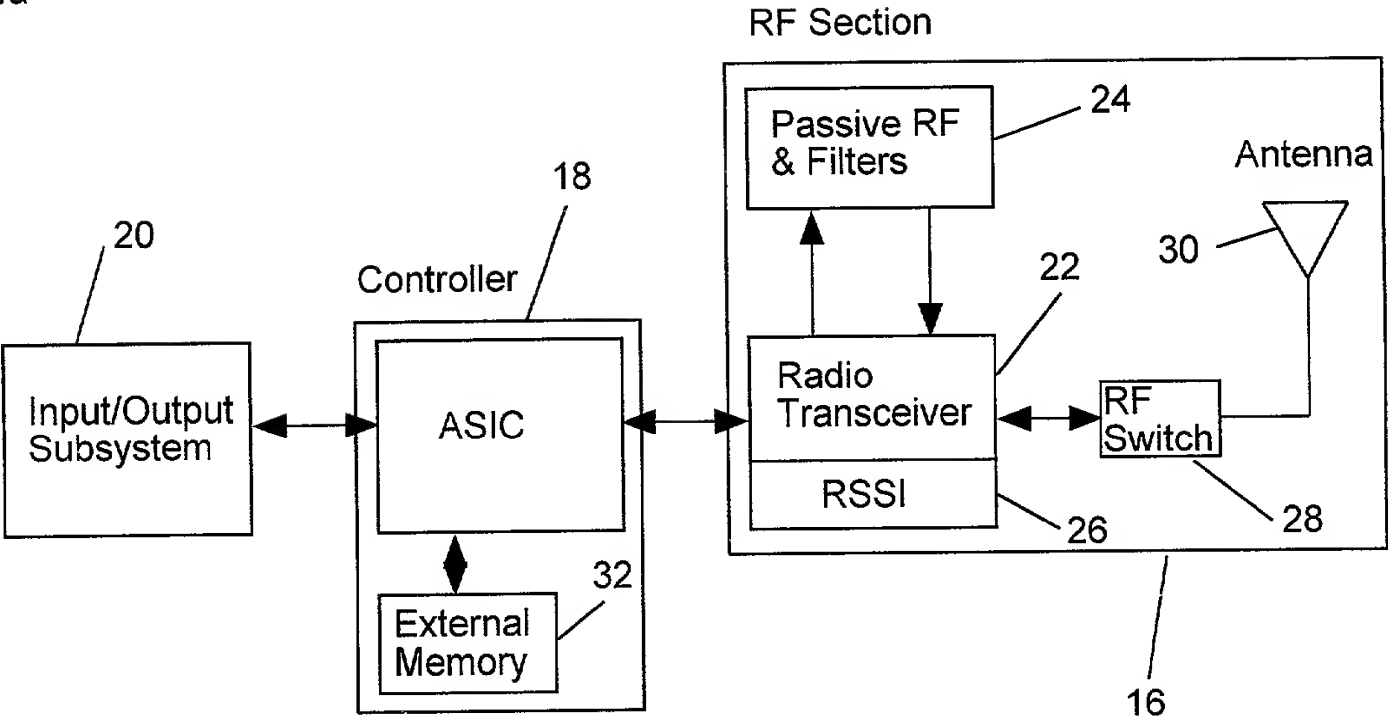


FIG. 4b Peripheral

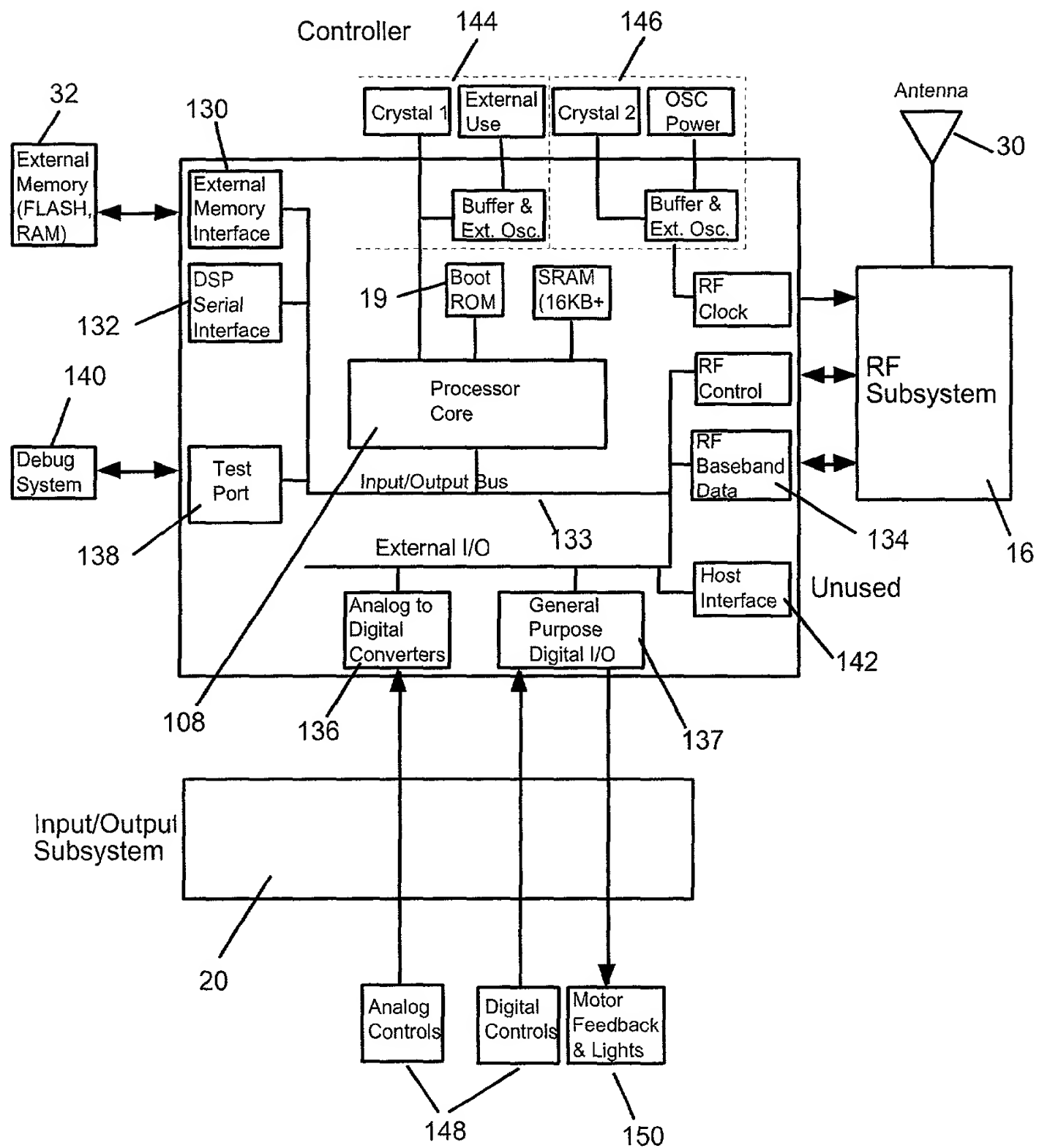


FIG. 4c Base Transceiver Subsystem

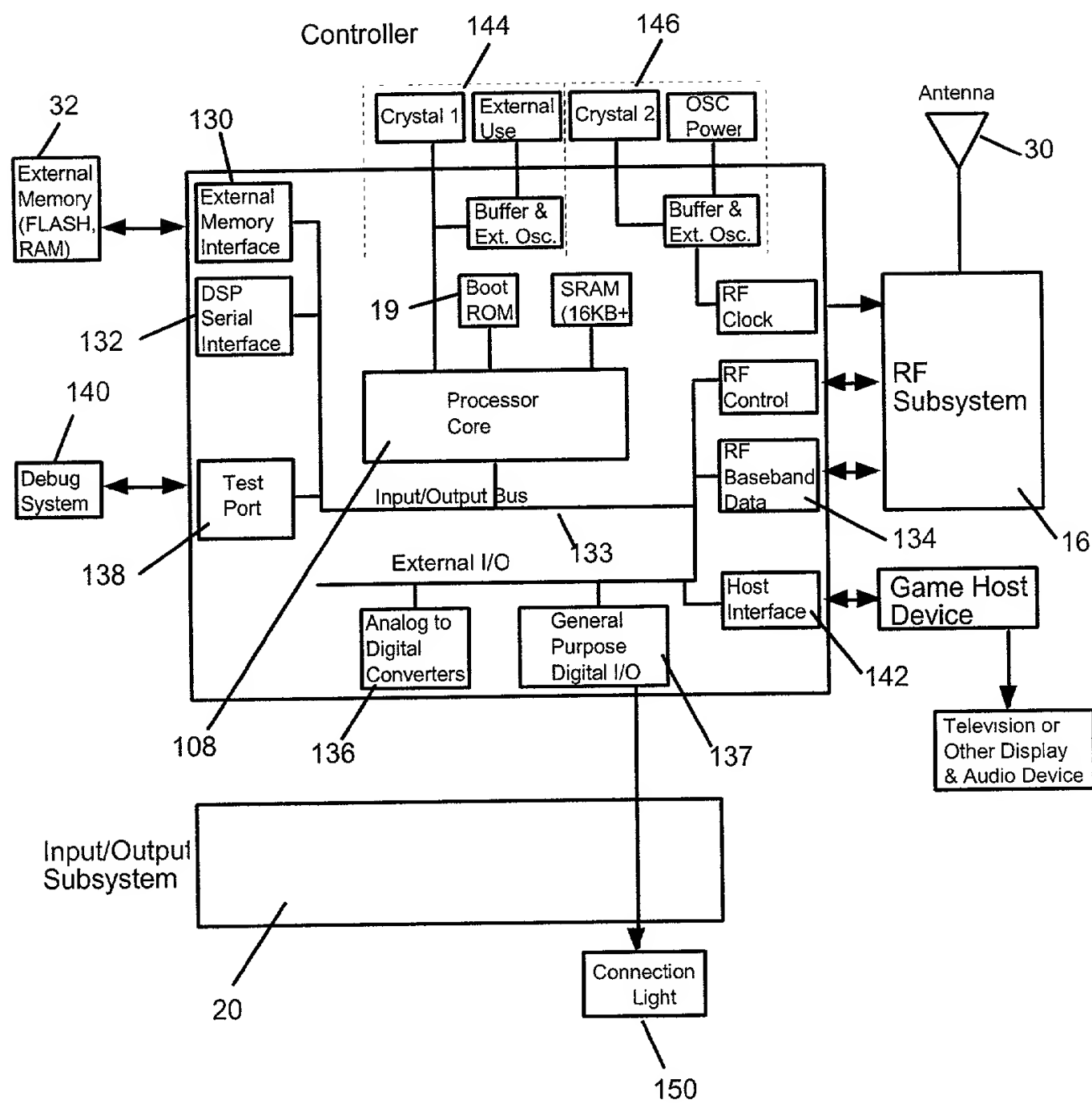


Figure 5

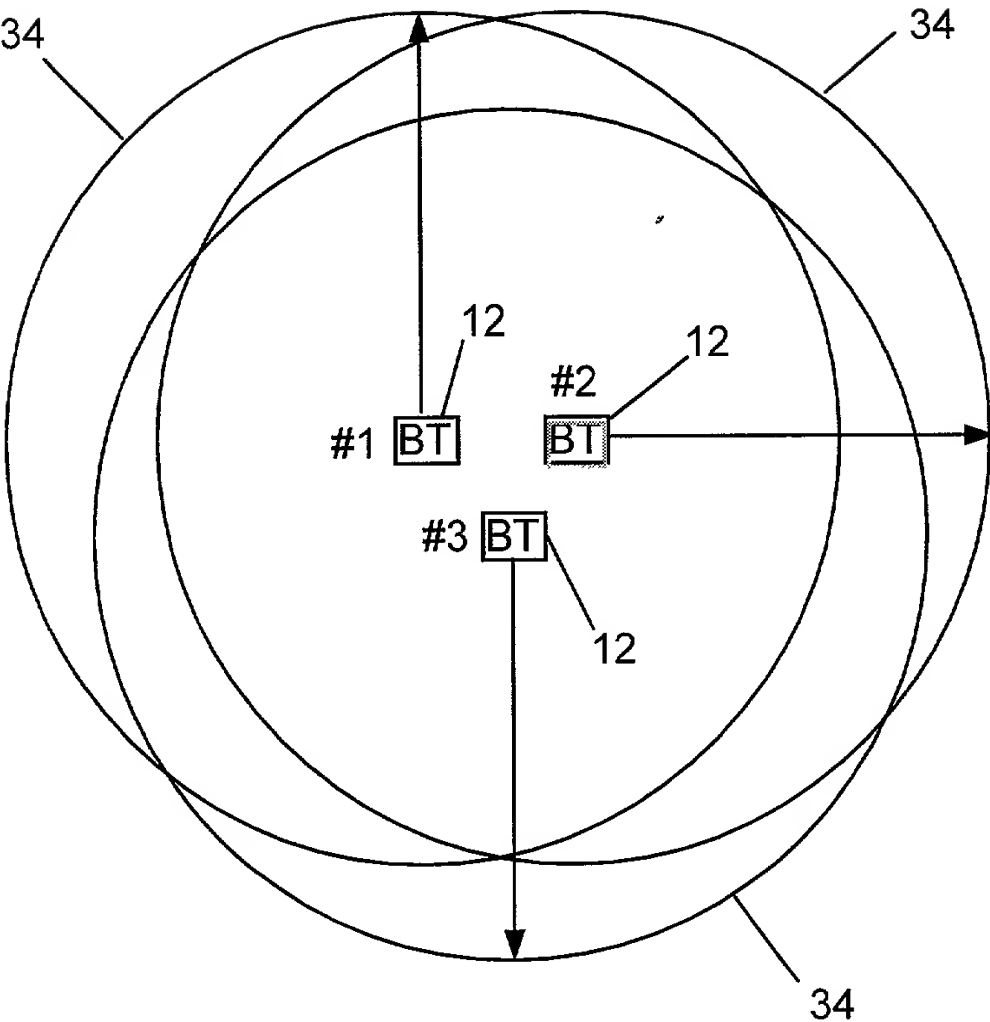


Figure 6

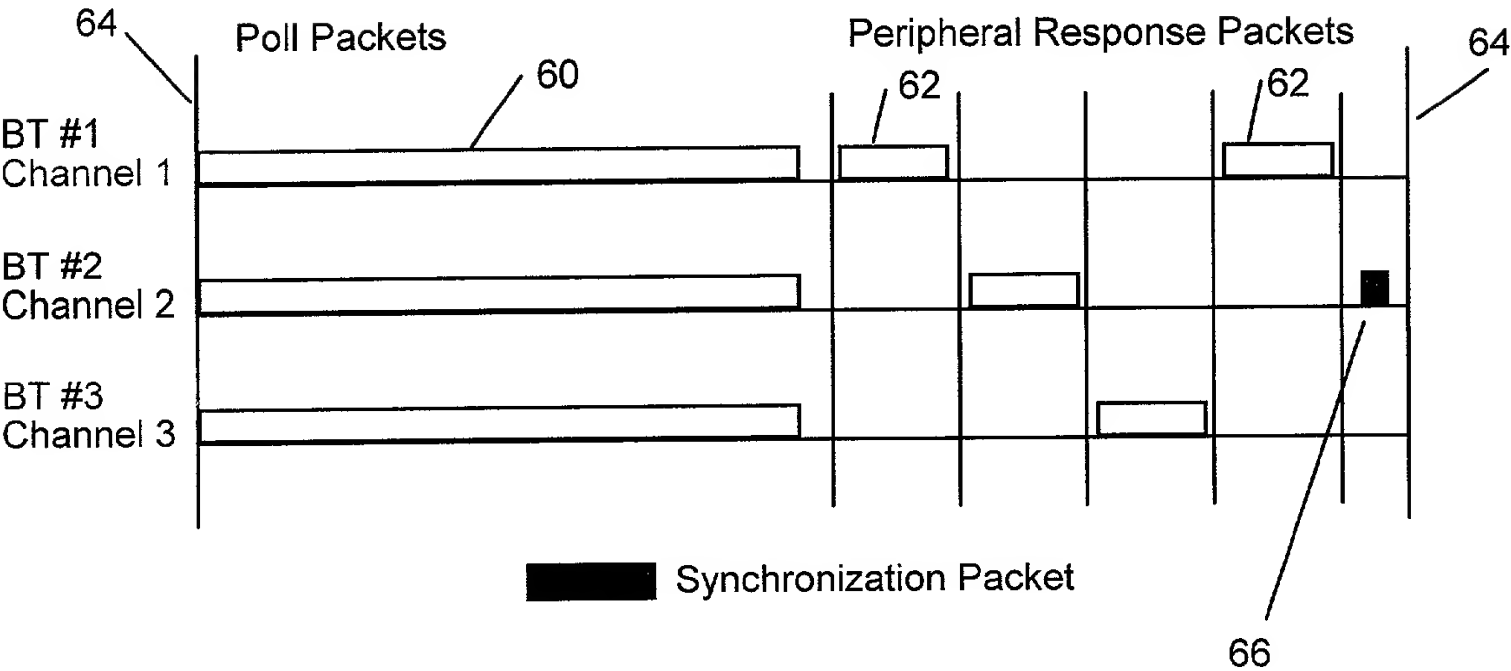


Figure 7

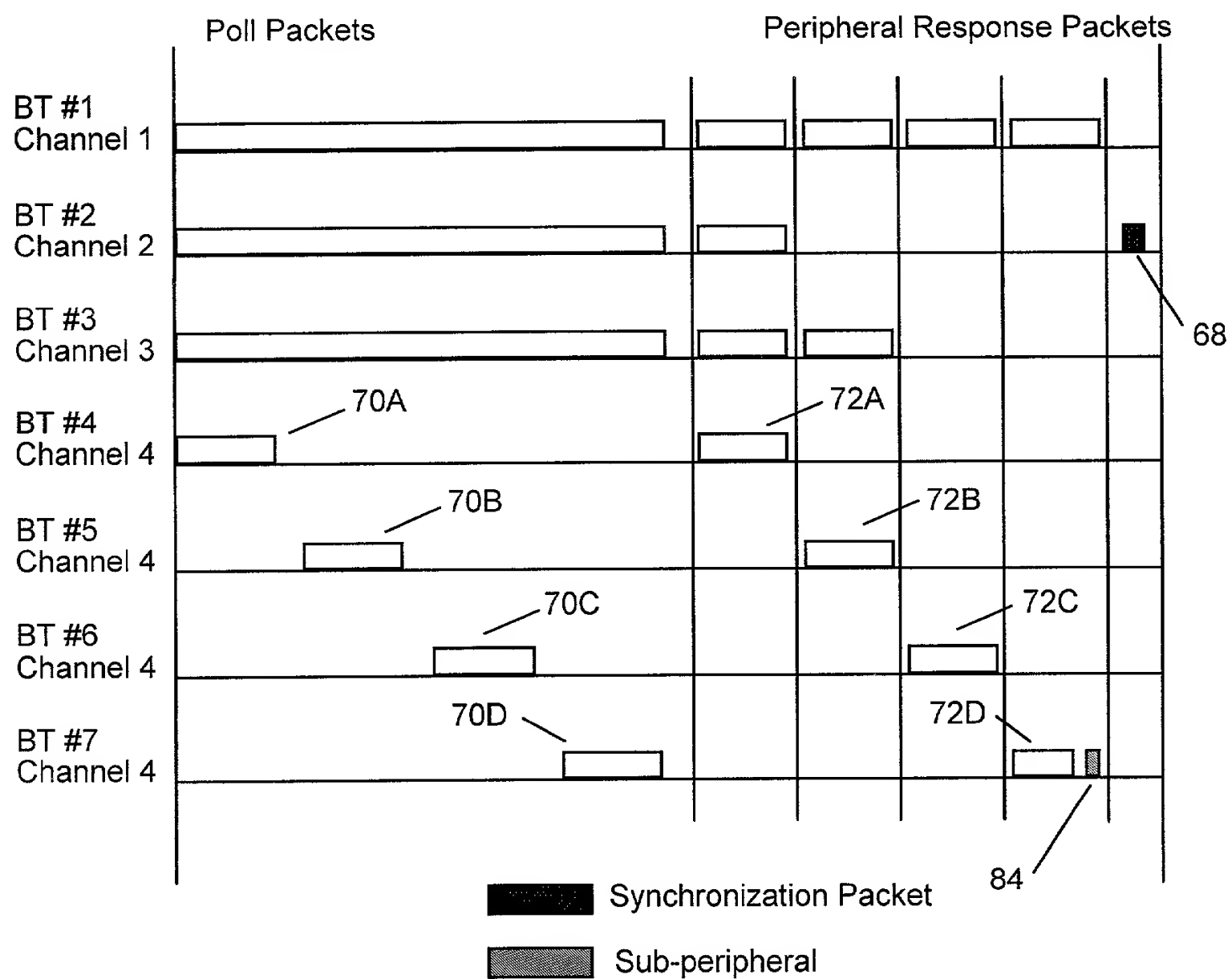


Figure 8a

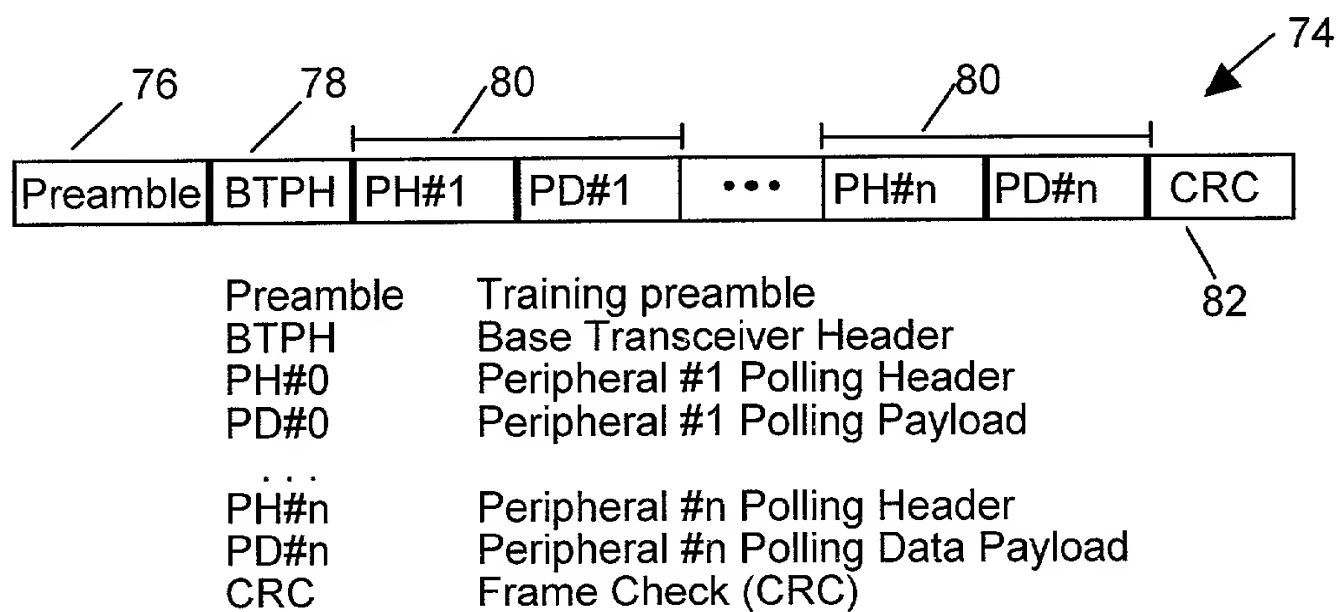


Figure 8b

POLL Packet  
PREAMBLE  
POLL HEADER (3 byte)  
START Code  
POLL Packet Identifier  
POLL Packet Length  
Message Type - e.g. JOIN type  
Message Data  
SYNC Sequence Type  
SYNC Sequence Pointer  
BT Sync Period  
BT ID Number  
BT Subslot Number  
Channel Hop Sequence Type  
Channel Hop Sequence Pointer  
Channel Hop Rate - every 1 to n volleys  
RESERVED  
Peripheral Field Identifier  
Peripheral Field Length  
P1 Header - P1, mating ID, data field length  
P1 Data  
...  
Pn Header  
Pn Data  
CRC

Figure 9a

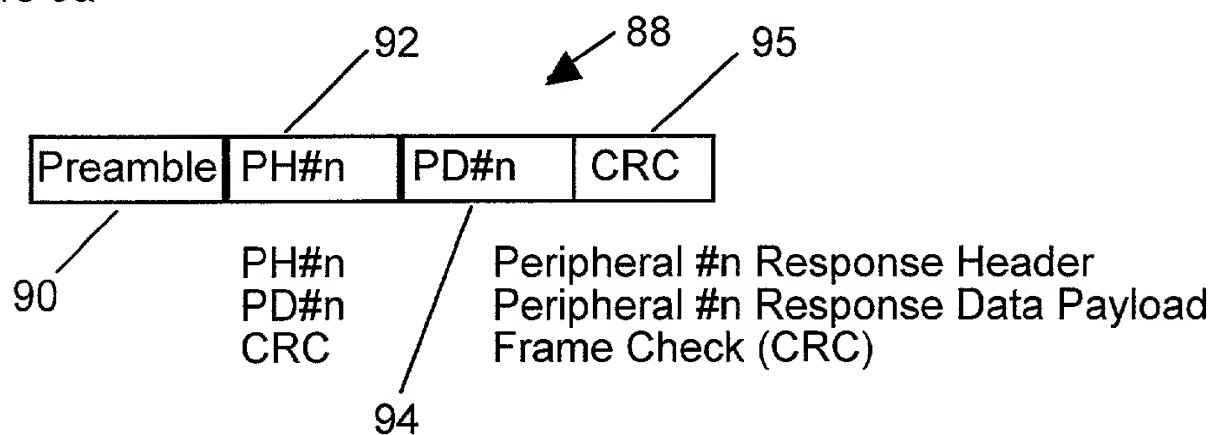




Figure 9b

RESPONSE Packet  
 PREAMBLE  
 RESPONSE HEADER (3byte)  
   START Code  
   RESPONSE Packet Identifier  
   RESPONSE Packet Length  
   Short Form Mating ID  
   RESERVED  
 RESPONSE DATA PAYLOAD  
   Message Type  
   Message Length  
   Message Data  
 CRC

Figure 10

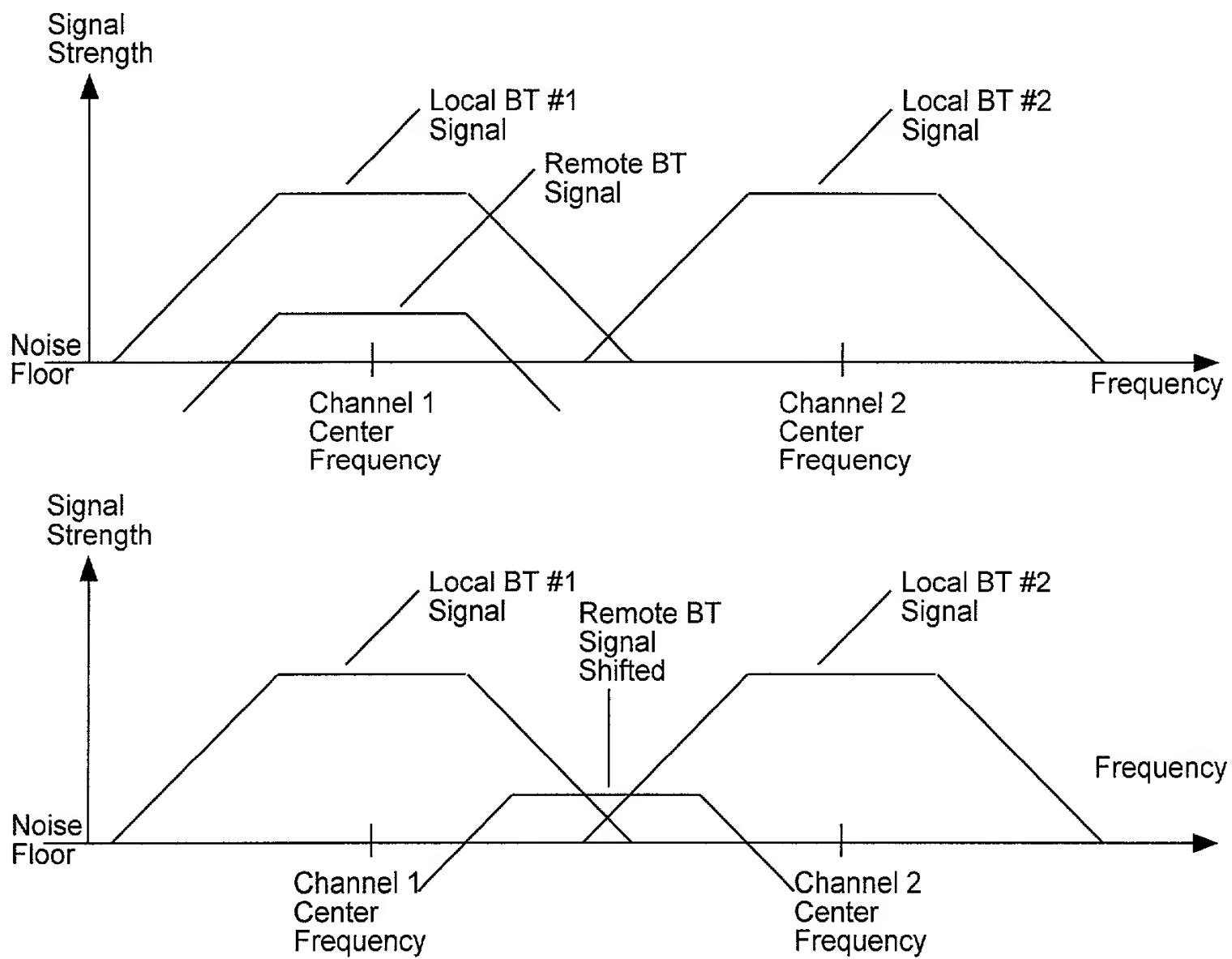


Figure 11a Synchronization Packet Format

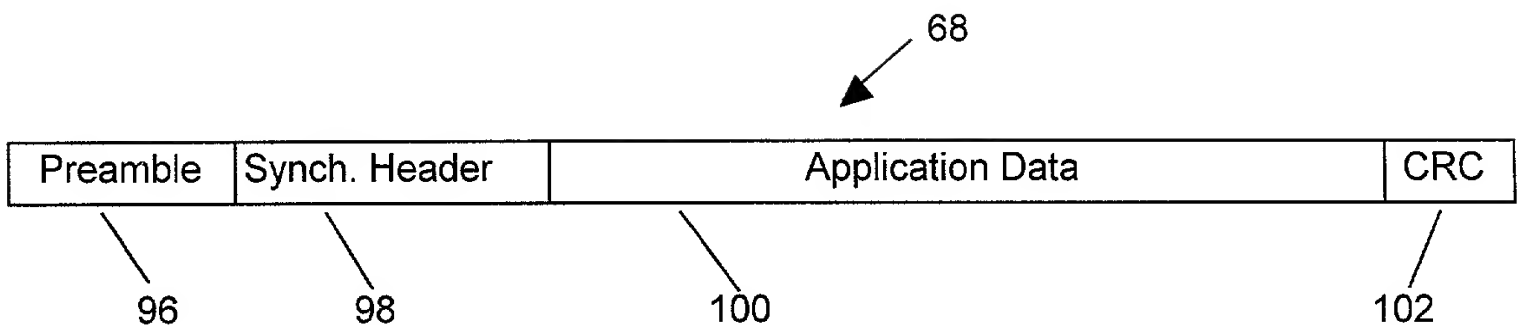


Figure 11b

SYNC Packet  
PREAMBLE  
SYNC HEADER (3byte)  
START Code  
SYNC Packet Identifier  
SYNC Length in bytes  
Code Type Used  
RESERVED  
APPLICATION DATA  
SYNC Sequence Type  
SYNC Sequence Pointer  
BT Sync Period  
BT ID Number  
BT Subslot Number  
Number of Channels  
Channel List  
Channel Hop Sequence Type  
Channel Hop Sequence Pointer  
Channel Hop Rate - every 1 to n volleys  
Number of BT Map items  
BT Map  
BT ID #1, Channel Hop pointer, SYNC Hop pointer  
BT ID #2, Channel Hop pointer, SYNC Hop pointer  
NULL, Channel Hop pointer, SYNC Hop pointer  
BT ID #3, Channel Hop pointer, SYNC Hop pointer  
Number of Peripherals  
Number of Slots  
P Map  
P ID #1, Slot Number e.g.S=1  
P ID #2, Slot Number e.g.S=2  
P ID #3, Slot Number e.g.S=3  
P ID #4, Slot Number e.g.S=3 - subperipheral  
Message Type - e.g. New BT, Channel abandon, Channel add  
Message Data  
CRC

Figure 12a Adding and Removing Base Transceivers

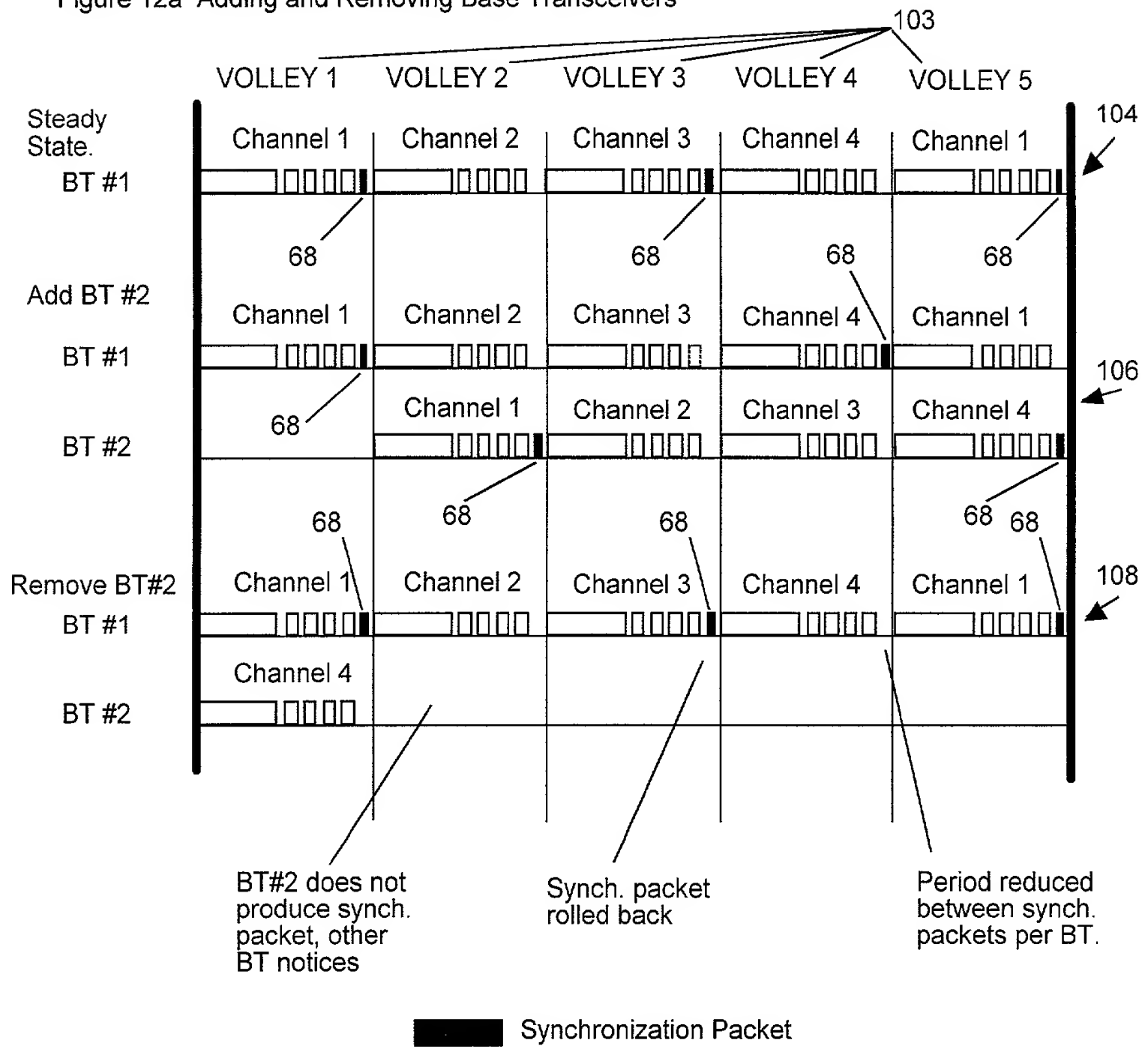


Figure 12b Adding a Base Transceiver - State Information

OPERATING PARAMETERS		STATE INFORMATION PER POLLING VOLLEY				
250	Polling Volley Number	1	2	3	4	5
252	SYNC Channel	1	1	1	4	4
254	BT Map BT #1	BT #1,1,1 NULL,4,4	BT #1,2,2 NULL,1,1	BT #1,3,3 BT #2,2,2 NULL,1,1	BT #1,4,4 BT #2,3,3 NULL,2,2	BT #1,1,1 BT #2,4,4 NULL,3,3
256	BT Map BT #2	No map, just listening	BT #1,2,2 BT #2,1,1 NULL,4,4	BT #1,3,3 BT #2,2,2 NULL,1,1	BT #1,4,4 BT #2,3,3 NULL,2,2	BT #1,1,1 BT #2,4,4 NULL,3,3
258	BT #1 SYNC Period	2	2	3	3	3
260	BT#2 SYNC Period	None, listening	3	3	3	3
262	Listening BTs	BT #2	BT #1	BT #1, BT #2	BT #2	BT #1
264	SYNC Packet Broadcasting BTs	BT #1	BT #2	Listen to NULL freq	BT #1	BT #2
266	SYNC Message BT #1	None	None	None	None	None
268	SYNC Message BT #2	None	New BT	None	None	None

Figure 13

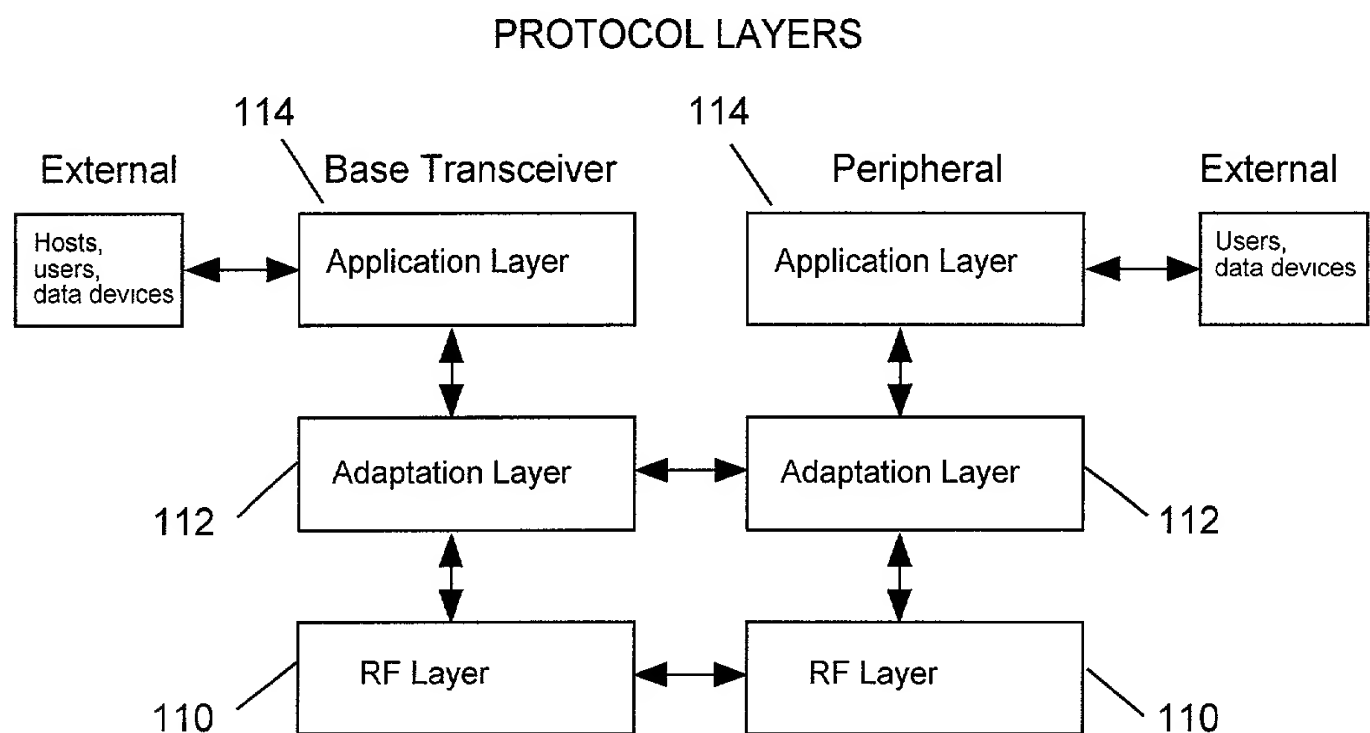


Figure 14

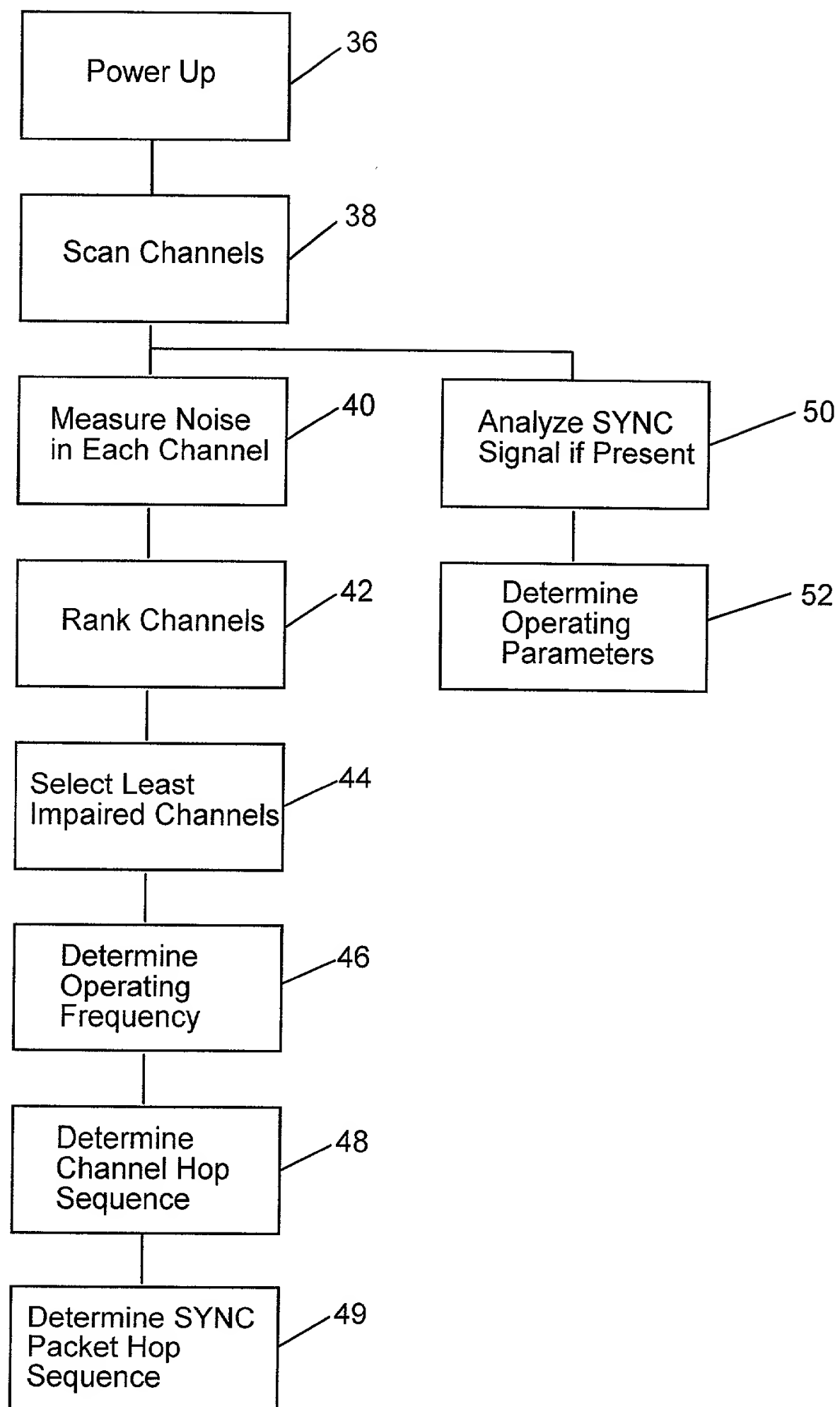


Figure 15

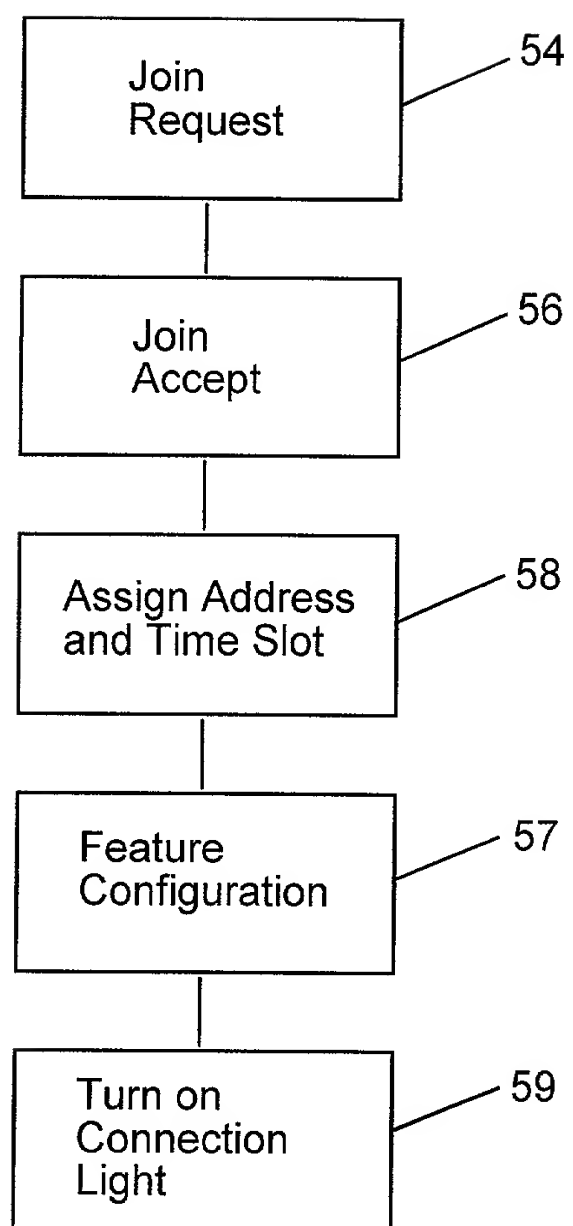


Figure 16 Resize Operation

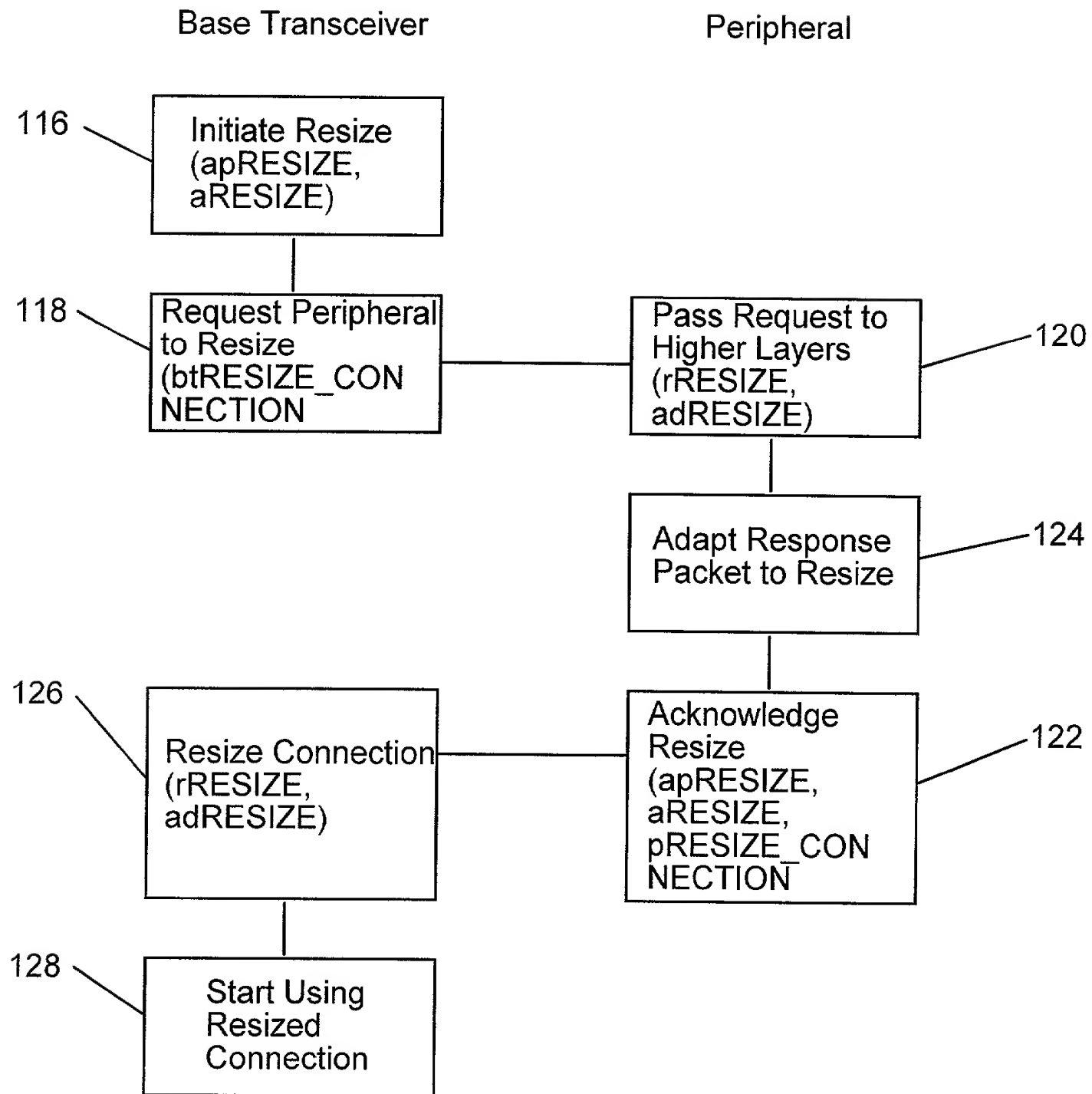


Figure 17 Bit & Word Synchronization

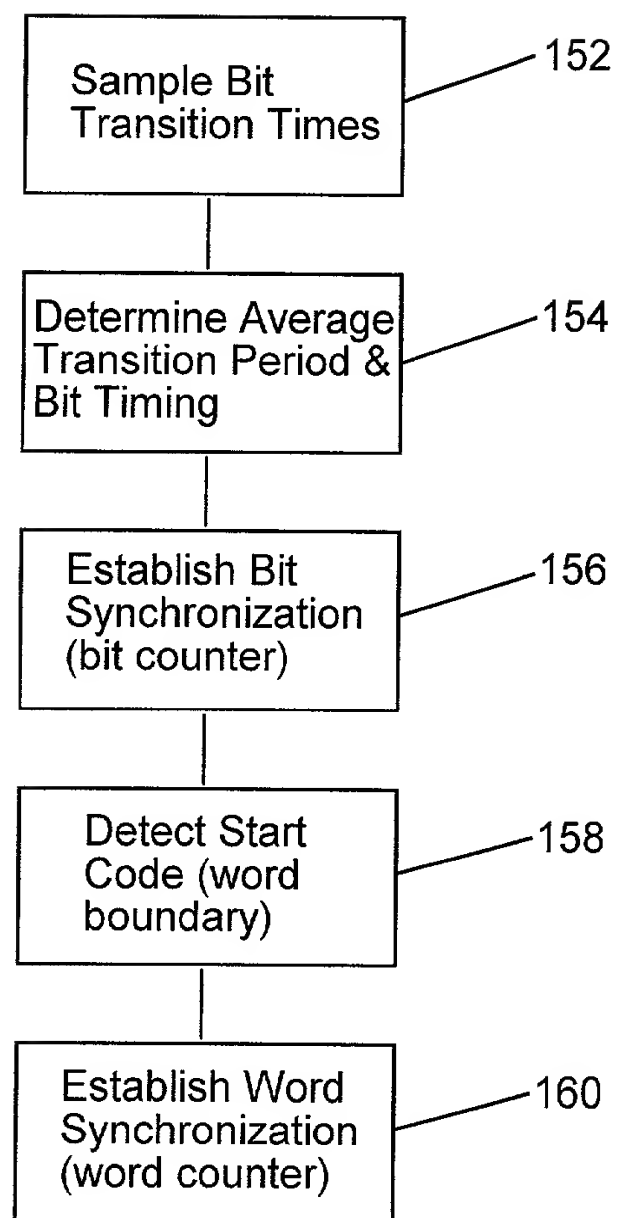




Figure 18 BT Polling Synchronization

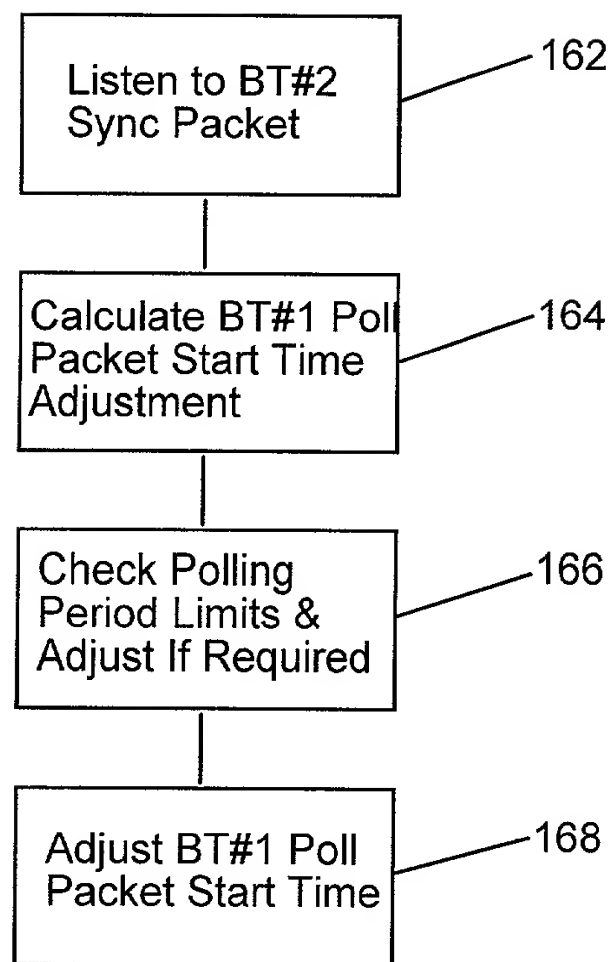


Figure 19 Base Transceivers Sharing a Channel

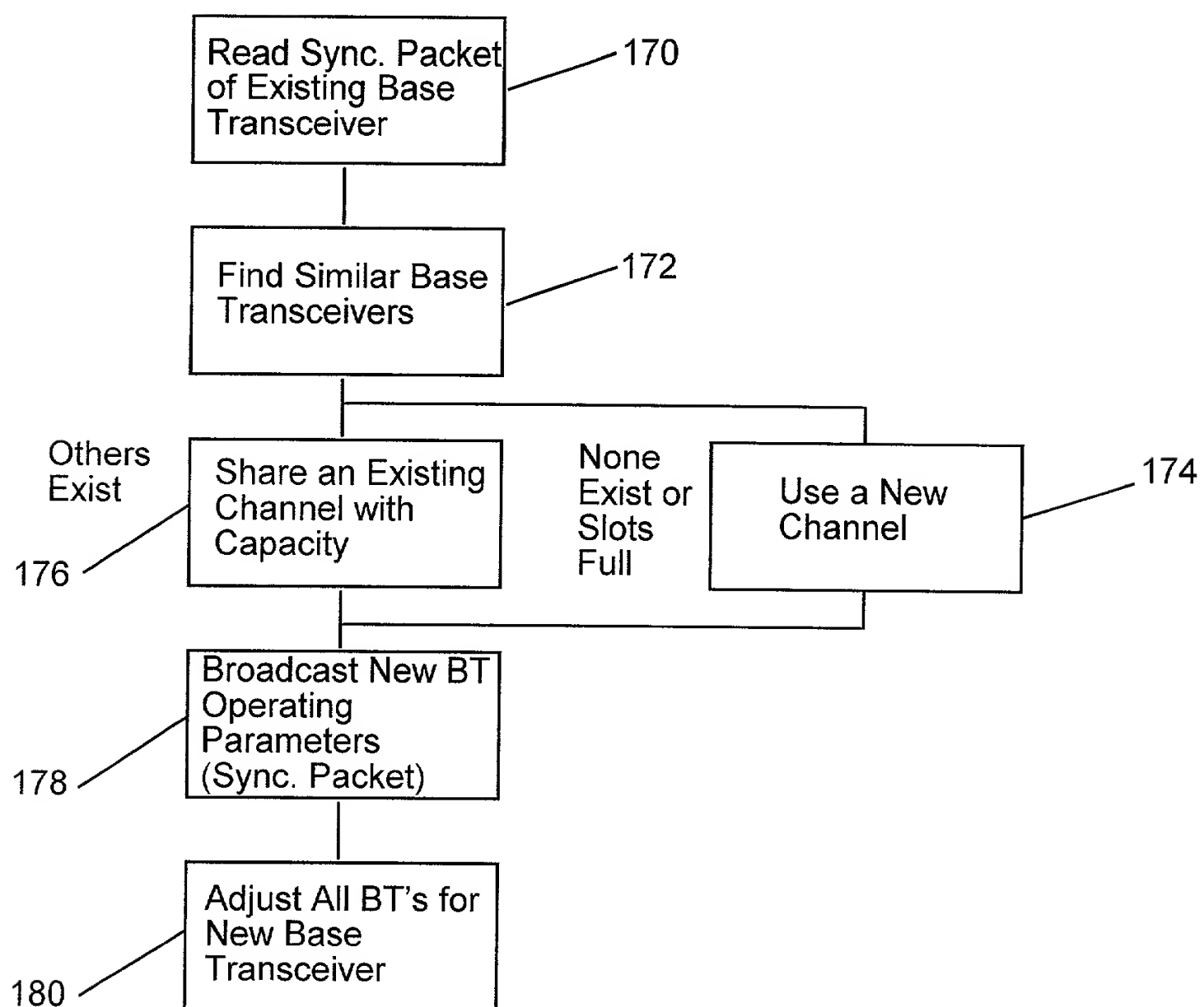


Figure 20 Manual Time Slot Change

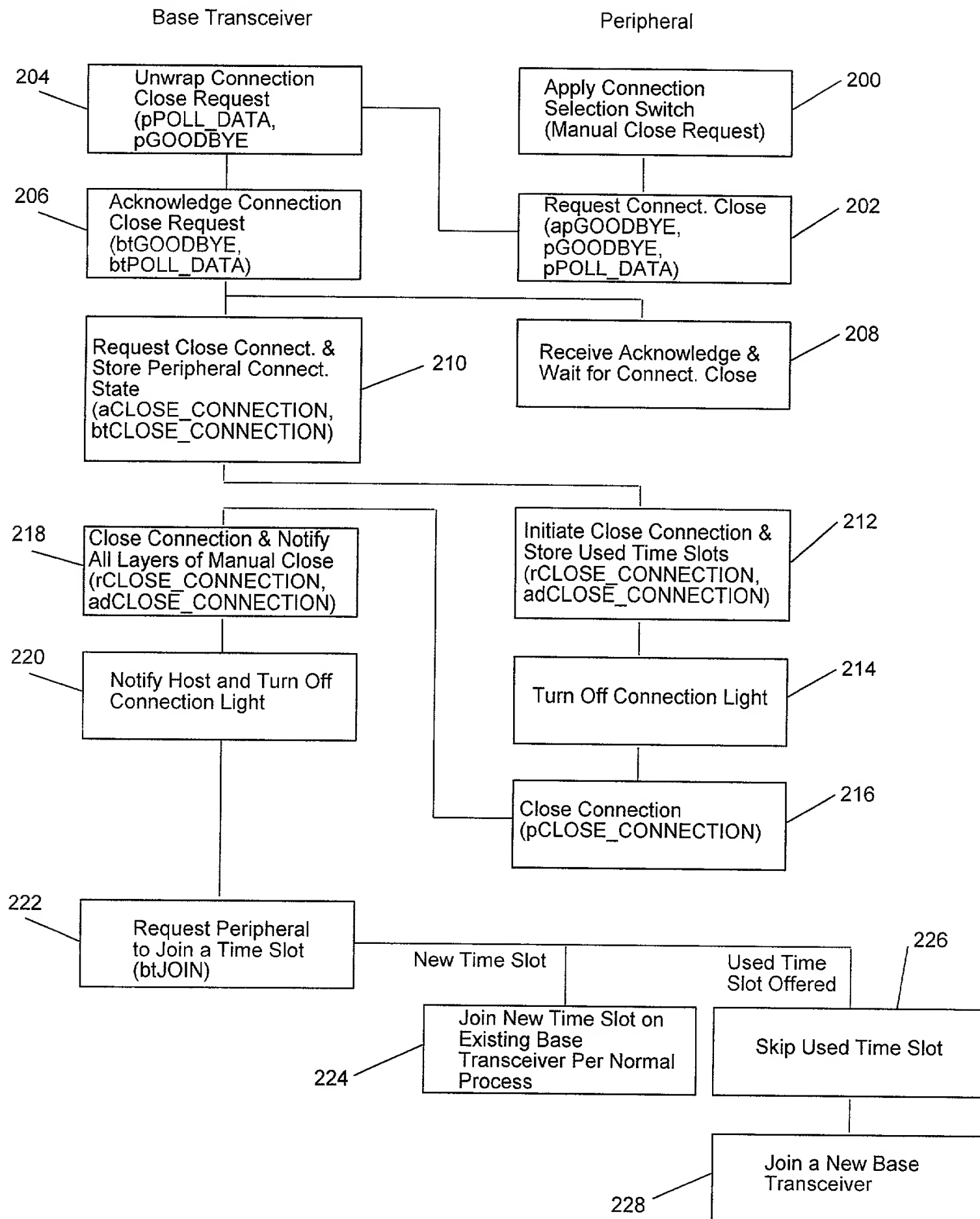


Figure 21 Bit Error Adaptation

